

JPRS 76083

21 July 1980

Worldwide Report

NUCLEAR DEVELOPMENT AND PROLIFERATION

No. 53



FOREIGN BROADCAST INFORMATION SERVICE

NOTE

JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service, Springfield, Virginia 22161. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

Current JPRS publications are announced in Government Reports Announcements issued semi-monthly by the National Technical Information Service, and are listed in the Monthly Catalog of U.S. Government Publications issued by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Indexes to this report (by keyword, author, personal names, title and series) are available from Bell & Howell, Old Mansfield Road, Wooster, Ohio 44691.

Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

21 July 1980

WORLDWIDE REPORT
NUCLEAR DEVELOPMENT AND PROLIFERATION

No. 53

CONTENTS

WORLDWIDE AFFAIRS

Brazilian Papers Discuss U.S., Soviet Antinuclear Moves (Various sources, 5-6 Jun 80)	1
Official Report Alleged Documentation Doubted	
Controversy Erupts in Brazil-FRG Nuclear Transfer Deal (JORNAL DO BRASIL, 14 Jun 80)	3
Unrestricted Technology Transfer Number of Plants at Issue	
FRG, Swiss Decisions To Base Nuclear Talks With U.S. (Martin Olivera; CONVICCION, 14 Jun 80)	5
Briefs	
Finnish Generator Repairs	7
French Blast Registered	7

ASIA

INDIA

Thorium Potential To Replace Uranium Noted (G. H. Keswani; THE TIMES OF INDIA, 4 May 80)	8
---	---

PHILIPPINES

Nuclear Plant Faces New Delays (PHILIPPINES DAILY EXPRESS, 9 May 80)	10
---	----

EAST EUROPE

INTERNATIONAL AFFAIRS

Nuclear Energy Programs in CEMA Countries (J. Brabec; PRACA, 9 Jun 80)	12
USSR-CSSR Nuclear Cooperation Increases (Various sources, various dates)	15
First CSSR Nuclear Plant Opens New Accord Signed Further Details	

LATIN AMERICA

ARGENTINA

Tlatelolco Ratification Motives, Gains Reviewed (Various sources, 12-13 Jun 80)	17
Safeguards Issue, by Luis Sartori Ratification Imminent, by Oscar Raul Cardozo Technical, Political Gains, by Martin Olivera	
Tlatelolco Treaty Ratification To Advance Nuclear Efforts (LA PRENSA, 17 Jun 80)	24
FRG Receives Assurances of Peaceful Aims (CLARIN, 13 Jun 80)	26
Briefs	
Atucha II Staffing	27
Lithium Reserves	27
Castro Madero in Yugoslavia	28

NEAR EAST AND NORTH AFRICA

KUWAIT

Briefs	
French Nuclear Reactor Purchase	29

SUB-SAHARAN AFRICA

NIGER

Data on SMIT's Production, Capitalization Set Forth (SAHEL HEBDO, 9 Jun 80)	30
--	----

SOUTH AFRICA

- Pelindaba Physicists Experiment With Hot Plasma
(RAND DAILY MAIL, 25 Jun 80) 32

WEST EUROPE

BELGIUM

- Briefs
Power Plant Shutdown 33

NETHERLANDS

- Dumping Radioactive Waste in Atlantic Protested
(ALGEMEEN NEDERLANDS PERSBUREAU, 20 Jun 80) 34

SWEDEN

- Area Citizens Organize To Halt Test Drilling for N-Waste
(Cecilia Steen-Johnsson; DAGENS NYHETER, 30 May 80) 35
- Power Firm Demands Government Compensate for Delay
(SVENSKA DAGBLADET, 31 May 80) 40
- Anti-N Power Group Holds First Meeting Since Referendum
(Ola Sall, DAGENS NYHETER, 8 Jun 80) 42
- Briefs
Nuclear Power Phaseout 45

SWITZERLAND

- Council of State Approves Nuclear Powerplant
(JOURNAL DE GENEVE, 29 May 80) 46

WORLDWIDE AFFAIRS

BRAZILIAN PAPERS DISCUSS U.S., SOVIET ANTINUCLEAR MOVES

Official Report Alleged

PY061506 Buenos Aires LATIN in Spanish 1658 GMT 5 Jun 80

[Text] Brasilia, 5 Jun (LATIN)--The newspaper JORNAL DE BRASILIA today published a report that there is a campaign--sponsored mainly by the United States and the Soviet Union--to apply pressure on the Brazilian Government in order to force it to paralyze the Brazilian nuclear program and to repeal the nuclear accord with the FRG.

This daily indicated that the report had been prepared by the Security and Intelligence Division [DSI] of the Mines and Energy Ministry and released to all the electrical power enterprises for the information of their presidents only.

In the report, whose text was published by the newspaper of this capital, the United States, the Soviet Union and the Jewish community in Brazil are charged with stimulating this campaign because of "their great interests at stake."

The report stated that this campaign, aimed at "applying pressure on the Brazilian Government in order to force it to paralyze the Brazilian nuclear program and to repeal or to spike the nuclear accord" between Brazil and the FRG, uses a variety of means, especially the press, to provoke mass movements protesting nuclear developments.

The report added that in addition to the press, the campaign uses scientific and technological meetings, the demonstrations by a small number of scientists, the social communities, the congressional investigative committee, and the business associations, to attain its objectives.

Among the methods employed by this campaign, the report mentioned the "fear technique" which acts surreptitiously to impress the people with the dangers of radioactivity.

The report added that sensationalist value of situations such as the nuclear accident at Three Mile Island in the United States, the film "China Syndrome," the dangers of environmental and sea pollution, the alleged unsafety of the nuclear plants, and other situations, is being exploited.

It also indicated that the economic factor is taken advantage of by "blowing-up the costs and terms of payment," at times when Brazil is undergoing a difficult economic situation. The report added that it is being said that Brazil does not need nuclear energy for the time being and that the quest for this energy is merely "a boost to the vanity of the leaders," especially the military.

It further indicated that an effort is being made to undermine the prestige of German technology and that the Germans are being presented as "revenge seekers who are using Brazil to produce military devices which they are prohibited from manufacturing," while the Brazilians are being shown as "pawns" [sometidos] who are "endangering the security of the community."

The report stated that "there are great interests at stake" and accused the United States of having constantly opposed Brazil's access to nuclear technology, and emphasized that the signing of the Brazilian-FRG nuclear treaty has "elicited the political and diplomatic reaction of the U.S. Government which has unsuccessfully tried to spike the treaty."

Documentation Doubted

PY061507 Sao Paulo Radio Bandeirantes Network in Portuguese 1000 GMT 6 Jun 80

[Excerpt] There are doubts about the authenticity of a report published yesterday by the newspaper JORNAL DE BRASILIA revealing the existence of a document prepared by the Security and Intelligence Division--DSI--of the Mines and Energy Ministry. The document reveals the existence of a group of persons who reportedly are preparing a campaign against the Brazilian nuclear program. This group would be made up of communists, Jews, U.S. citizens, Soviets and journalists.

Armando Cunha, press adviser of the Mines and Energy Ministry, stated that the document was presented to the DSI as a proposal.

The U.S. Embassy, through its spokesman Edward Elly, termed the report false, absurd and unfounded. The document also reveals that the U.S. Government maintains four scientific attaches at the Sao Paulo consulate, who are experts in the nuclear sector, with the objective of preparing a campaign against the nuclear agreement and seeking to discredit and jeopardize the development of the nuclear program.

Elly answered that there are no scientists in Sao Paulo. And regarding charges on the presence of 11 U.S. diplomatic officials in Brazil who are working against the nuclear agreement, as is known by the SNI [National Intelligence Service], Elly did not give any objective answers. He said only that the absurd and unfounded remarks included in the alleged document are not worthy of comment.

Passing through Araca yesterday, Mines and Energy Minister Cesar Cals declined to comment on the subject. But one of his advisers, (Tancredo de Carvalho), said that the document is not official, but only a personal analysis of the author, (Armando Barcello).

CS0: 5100

CONTROVERSY ERUPTS IN BRAZIL-FRG NUCLEAR TRANSFER DEAL

Unrestricted Technology Transfer

FY161706 Rio de Janeiro JORNAL DO BRASIL in Portuguese 14 Jun 80 p 19

[Text] Brasilia--The cooperation agreement for the peaceful use of nuclear energy between Brazil and the FRG does not restrict the transfer of nuclear technology to a set number of nuclear plants to be installed in Brazil. This statement was made yesterday by a high-ranking source of the nuclear sector on learning about the remarks made by FRG Ambassador Georg Kastl that the transfer will be made only after the construction of the eight nuclear plants provided for in the Brazilian nuclear program.

The source added that the question of adjusting the timetable for the construction of the nuclear plants and the transfer of technology "is under discussion and gives room for different interpretations because the agreement does not mention four or eight nuclear plants and does not restrict the transfer of technology to a set number of plants to be built."

Based on this information, he said that the position expressed by the ambassador must be the position of the FRG Government. "The Brazilian Government feels that the transfer can be made with the installation of only four plants." He added that the controversial point is the deadline for completion of the program provided for in the agreement.

He explained that the Brazilian Government feels that the total transfer from the FRG to Brazil of reactor technology, engineering [given in English] and the fuel cycle must be made by 1990, the deadline established when the agreement was signed on 27 June 1975, regardless of the number of nuclear plants in operation by then.

He stated that "the German Government must already consider the year in which the eighth nuclear plant begins operations to be the deadline for the total transfer of technology, which the Brazilian Government feels will be 1995."

Regarding remarks which are being made by Mines and Energy Minister Cesar Cals that the transfer of technology would be made with the installation of the first four nuclear plants provided for in the agreement, it is part of the spirit of interpretation of the agreement by the Brazilian Government. [sentence as published]

Number of Plants at Issue

PY171837 Rio de Janeiro JORNAL DO BRASIL in Portuguese 14 Jun 80 p 19

[Excerpts] Brasilia--The total transfer of technology of the nuclear fuel cycle from the FRG to Brazil will consist only of the installation of the eight nuclear plants provided for in the Brazil-FRG agreement. This statement was made yesterday by FRG Ambassador to Brasilia Georg Kastl.

This statement contradicts recent remarks made by Mines and Energy Minister Cesar Cals that the total transfer of technology could be made with the installation of only four nuclear plants. Manfred Hagen, the science attache of the FRG Embassy, added that the transfer would be possible in a shorter period, even though Brazil will need at least 20 years to absorb such a sophisticated technology.

Regarding the current differences between the Brazil-FRG and the Argentina-FRG agreements, pointed out by some as being advantageous for the Argentines, Hagen explained that the agreements are very different: "The Brazil-FRG agreement provides for the total transfer of nuclear technology while the Argentina-FRG agreement is by far less embracing."

The science attache of the FRG Embassy also criticized the form in which the construction of the nuclear plant Angra 2 and Angra 3 is being conducted. He said that FURNAS Electric Power Plants and NUCLEBRAS [Brazilian Nuclear Corporation] had not decided before beginning the construction which of them would be responsible for the construction, delaying the decisions to the moment when the construction is to be underway.

Claiming it was his personal opinion, Hagen stated: "I think a great number of the problems in building Angra 2 and 3 stem from the lack of an anticipated discussion between FURNAS and NUCLEBRAS about sharing the responsibility during the construction of the projects."

CS0: 5100

FRG, SWISS DECISIONS TO EASE NUCLEAR TALKS WITH U.S.

Buenos Aires CONVICCION in Spanish 14 Jun 80 p 12

[Article by Martin Olivera: "Switzerland Officially Authorized Sale of Heavy-Water Plant to Argentina"]

[Text] A cable from the AFP [French Press Agency] signed yesterday in Bern announces that the Swiss government authorized the firm of Sulzer Brothers to supply a heavy-water plant to Argentina's CNEA [National Atomic Energy Commission].

This information coincides with a report received a day earlier from Bonn to the effect that the government of West Germany had authorized KWU [Power Plant Union] to supply the technology necessary for the construction of the Atucha II power plant.

Both reports are important since, in spite of the fact that the governments in Bern and Bonn are already pledged to authorize these transactions, a specific posture was made internationally official this week.

At any rate, the construction of Atucha II and of the heavy-water plant in Arroyito are now irreversible facts, beyond any pressures which may possibly be exerted by the big nuclear powers.

With these two important problems resolved once and for all, the CNEA has its hands free to devote itself to two topics which are closely interconnected: The ratification of the Tlatelolco Treaty and the supply of enriched uranium.

Concerning this topic, CNEA Chairman Vice Adm Carlos Castro Madero told the magazine ENERGIA that "Argentina addressed a petition to the State Department which, in accordance with the Act, required a declaration to the effect that all installations were covered by safeguards, that the uranium to be received would not be used [as published] for peaceful nuclear explosions, and that the installations were adequately protected in physical terms. Later on, that agency increased the requirements to the point of demanding almost total safeguards."

It is obvious that what the United States wants is required by the Nuclear NPT and, even in its less demanding version--that is to say, without total safeguards--this is far beyond what is required under the Tlatelolco Treaty.

It must also be remembered that a short while back, Vice Adm Castro Madero demanded the right for the South American countries to conduct nuclear explosions for peaceful purposes in accordance with what is explicitly authorized in the Tlatelolco Treaty, which is why it is very difficult for the CNEA to accept demands contrary to those initially proposed by the State Department.

However, the revision of United States foreign policy toward Argentina, which had been noted in recent months--more precisely, ever since the mission by Gen Andrew J. Goodpaster--may result in more flexibility for these safeguards and in moving them closer to the requirements of Tlatelolco.

If we add to this the fact that Argentina has already launched negotiations with the IAEA, precisely in order accurately to spell out the Tlatelolco safeguards, and in order later on to ratify the treaty, Washington and Buenos Aires are moving ever closer together on the matter of enriched uranium.

There is no doubt that the position adopted by West Germany and Switzerland, with respect to meeting the safeguards proposed by the CNEA, that is to say, ignoring the oppressive clauses of the NPT, will also help improve the nuclear dialog with the White House.

After all, the authorizations from Bern and Bonn guarantee Argentina's atomic independence and, on the other hand, enriched uranium is only a minor factor which is used by practicing and research doctors so that it does influence the infrastructure but the development of the nuclear plants.

Besides, the fact that two countries, such as Switzerland and West Germany, which are obviously in favor of the NPT, have become convinced as to the strictly peaceful purposes pursued by Argentina--otherwise they would not have given their authorizations--is another strong argument in favor of doing away with the puerile fears of the Atomic Club regarding a presumed nuclear armament drive in Argentina.

It seems that the moment has come at last when people realize that building an atomic bomb is not a simple technical decision but a policy decision. And Argentina has already stated that this is not its objective.

5058

CSO: 5100

WORLDWIDE AFFAIRS

BRIEFS

FINNISH GENERATOR REPAIRS--Repairing the faults discovered in the welding seams of the steam generator of the Loviisa-1 nuclear power station will be discussed between a group of Imatran Voima [power company] engineers who left for Moscow today, and representatives of the Soviet suppliers of the Loviisa power stations. It is not yet known whether these faults will extend the planned 2-month annual servicing of the Loviisa-1 power station. The servicing, which is currently underway, is due to be completed by the middle of July. [Text] [LD110135 Helsinki Domestic Service in Finnish 1030 GMT 10 Jun 80]

FRENCH BLAST REGISTERED--Wellington, June 18 (AFP)--A French nuclear blast of moderate size has been recorded by a New Zealand seismic monitoring post in the Cook Islands. Government scientific staff in Wellington said the moderately large underground test was recorded at about 6:30 am Tuesday morning New Zealand time. They said the blast was not up to the size of the largest nuclear test shots fired by the French in recent years at their Mururoa Atoll testing site. But the seismic recording did rank it among the bigger blasts. On Monday the Greenpeace organization in New Zealand predicted the test after sources inside the French Government leaked the information to them. Greenpeace claimed the blast would be a test for a multiple rocket warhead. It said blast would be the first in a series of five or six tests which would continue until early July. [Text] [OW180125 Hong Kong AFP in English 0120 GMT 18 Jun 80]

CSO: 5100

THORIUM POTENTIAL TO REPLACE URANIUM NOTED

Bombay THE TIMES OF INDIA in English 4 May 80 p 8

[Article by G. H. Keswani: "The Heart of the Matter"]

[Excerpt] Our Hope: Thorium

As I explained in an earlier article our resources of coal and hydro-power are so limited that even with a modest programme of growth, the coal reserves will be exhausted and hydro-power fully used up by the year 2020 A.D. This estimate is based on an optimistic figure of reserves of coal aggregating 40 billion tonnes with a recoverability of 50 percent, and hydro potential of 100,000 MW (megawatts or million watts). The rate of growth of energy consumption assumed seven percent compound rate upon the year 2000 A.D., so as to reach consumption of energy per capita in 2,000 A.D. equal to what it is at present in China, and a further growth at the rate of 5.5 percent upto 2020 A.D.

Surely, we shall not be swimming in smooth waters after 2020 A.D. without an alternative source of energy. The abc calculations assume that the vaporization of oil, animal dung and firewood in the total energy consumption (nearly 40 percent now) remains the same in future, as it is now. If the proportion of these is to diminish, then the coal and hydro reserves would be exhausted even earlier.

Our only hope is nuclear power. If we hang back, the sure result will be a famine of energy. We have reserves of about 50,000 tonnes of uranium, containing about 350 tonnes of U-235, which could generate about 2500 billion kWh of electrical energy. (Our yearly production of

electrical energy at present is 110 billion kWh.) Assuming that in the year 2000 A.D. the installed capacity for nuclear electrical energy is 20,000 megawatts, the generation of energy in one year would be 100 billion kWh, which is one-twentyfifth of the energy expected from our total reserves of U-235.

But, as we saw earlier, surplus neutrons released by the fission of U-235 will breed plutonium-239 from U-238 (about 70 percent is plutonium-239 and 30 percent is non-fissile plutonium-240 which is a bit of a nuisance). Plutonium-239 can be separated chemically from the burnt-up uranium mixture, and used with uranium-238 in the same manner as uranium-235, to breed more plutonium-239 from uranium-238. It is not yet possible to say how much of uranium-238 can thus be utilised by successive breeding.

One way of increasing the burnt-up percentage of uranium-238 is to remove the moderator, which is normally used in some reactors to slow down the neutrons (U-235 fissions with a fast or a slow neutron.)

The fast breeder reactors, using fast neutrons, will however require expert technical staff for supervision. There is no doubt that India has these men, in numbers and skills to match any country. Whatever be the multiplier in the utilisation of uranium through the fast-neutron-plutonium-breeding technology, our

uranium reserves will be used up before long, because in the next century, earlier than later, we shall have to find fully a replacement for coal.

Our ultimate agent of prosperity will be thorium, of which we have 0.36 million tonnes, perhaps the largest in the world. Fertile thorium-232 can be transmuted into fissile uranium-233, another isotope of uranium, by neutron capture. All our energy eggs have therefore to be placed in the breeder basket. A fast breeder test reactor is under construction at Kalpakkam near Madras and it is no exaggeration to say that the future of India depends on the success of this facility.

What I have said above is not at all new. Bhabha, to whom Indian science owes the greatest debt, had clearly defined the strategy for development in 1954. This was: first stage of natural uranium reactors for producing power and plutonium, second stage of plutonium-based fast breeder reactors for producing power and more plutonium as well as uranium-233 using thorium, and third stage of breeder reactors to produce uranium-233 from thorium for producing power. That brings us finally to the questions of the progress made and possibilities.

Progress And Possibilities

Our nuclear energy programme got off to a good start. The first power plant consisting of two

200 MW units was installed at Tarapur near Bombay in 1969. It was imported from U.S.A. and uses uranium enriched in U-235 which we are not in a position to produce. (Because enormous investments would be necessary.) After the nuclear explosion at Pokaran, the U.S.A. adopted a peculiar attitude, violating its contractual obligations to supply the enriched fuel, on the suspicion that the explosive device at Pokaran used plutonium bred in the reactor. The plant is now kept going with whatever improvisation is possible.

The second plant consisting of two units, each capable of generating 220 MW, was installed at Kota. Major equipment for one unit was mostly imported from Canada but many items of ancillary equipment were manufactured in the country as also half of the initial fuel charge — and this was of a quality which surprised the principals. For the second unit, a lot of equipment including major nuclear components were manufactured in the country. The construction was taken up wholly by the Indian engineers. The first unit went into operation in the year 1973 and the second in 1977. These units use natural uranium without enrichment of the U-235 content. Heavy water is used as moderator for slowing down the neutrons.

The name of the Canadian reactor is CANDU, short for Canadian Deuterium Uranium, but the quality of its design is better described by the words with the same sound: Can Do (It). It is a tribute to the sagacity of Bhabha and his team that they selected this, then-unproven, design, for India. It is the most suited to our situation. For one, it uses natural uranium, for another it gives three to four times as much power as some other competitive designs, and for still another it is a very safe reactor. We must doff our caps to CANDU for another reason. The CANDU system can use the mixed thorium-uranium-233 cycle with a burn-up ratio of five percent; it is possible that this figure may go up to 50 percent. If we could use half of the energy in our thorium deposits, our energy requirements would be met for many thousands of years, long after the oil-kingdoms have dried

up.

The third plant comprising two units of 235 MW at Kalpakam near Madras is based on the concept of total indigenous responsibility. So also is the fourth plant of the same capacity at Narora. Canadian designs of reactors with suitable improvements are being used in these plants also. Unfortunately, due to delayed response from the industry, these two plants will get progressively ready for operation only by 1984.

Since it takes about eight years to build a plant, we must plan for three plants, each comprising two units of 235 MW capacity, per year on an average, based on the CANDU system. If we are to have an installed capacity for nuclear electricity of 20,000 MW in 2000 A.D. If we can build plants at Madras and Narora, why can't we make similar plants at other places? The breeder technology can be introduced around 1990. The five heavy water plants should together be manufacturing a total of 300 tonnes a year by the end of 1981. Now that the teething troubles are over. Since the heavy water plant at Kota is based on indigenous technology, it can be replicated.

I believe we already have or can develop fully the needed capacity for uranium and thorium mining, extraction, conversion, fuel fabrication, and instrumentation. In research and manpower, the Bhabha Atomic Research Centre can provide solid backing required for this energy programme. At this Centre we have the most precious pool of scientific and technological talent waiting to be used fully. Only the government and industry have to brace themselves up. Regarding hazards of nuclear reactors there have been great arguments about it. Sometimes it has reached the level of hysterical propaganda. At least this is certain that there is no other energy technology which is less risky when everything is counted in. One could also debate on the economics of nuclear energy until the cows come home. But what are the alternatives anyway? Why don't they speak?

PHILIPPINES

NUCLEAR PLANT FACES NEW DELAYS

Manila PHILIPPINES DAILY EXPRESS in English 9 May 80 pp 1, 2

[Text] Construction of the nuclear power plant in Morong, Bataan, will not be continued despite approval Tuesday by the United States Nuclear Regulatory Commission of the issuance of an export license to Westinghouse Corp. which is undertaking the Bataan project.

Energy Minister Geronimo Velasco, concurrent National Power Corp. chairman said that the plant's construction will be suspended until basic issues such as safety are satisfactorily resolved.

Velasco has received advice from Westinghouse Electric Co. that the NRC has approved the issuance of an export license for the nuclear plant.

Velasco said a Westinghouse panel headed by executive vice president Theodore Stern will arrive this month to discuss safety measures for the plant will not pose any undue risks to the health and safety of the public."

Construction of the plant was stopped in June last year because of opposition.

President Marcos then formed a commission to look into the safety aspects of the nuclear plant as an aftermath of growing worldwide concern.

The commission, which was chaired by Justice Minister Ricardo Puno, recommended to the President that additional, adequate and acceptable safeguards be introduced.

Velasco said safety is the overriding consideration in resolving issues.

From an economic standpoint, he explained, the early completion of the plant will prove beneficial to the country, representing savings of 6.5 million barrels of imported oil annually which cost \$300 million.

"But we will not sacrifice safety in favor of money," Velasco said.

He also disclosed that the question of who will pay for the costs of introducing additional safety features on the plant still remains to be answered.

Although Westinghouse vice president Aura Simmons said under oath during the Puno Commission hearings that Westinghouse will introduce at their expense all safety safeguards that may be required, Velasco said this will still have to be discussed further.

CSO: 5100

INTERNATIONAL AFFAIRS

NUCLEAR ENERGY PROGRAMS IN CEMA COUNTRIES

Bratislava PRACA in Slovak 9 Jun 80 p 4

[Article by J. Brabec: "At a Faster Pace"]

[Text] Against the background of the oil crisis, atomic energy is coming into its own. Even in such countries as the United States, Sweden and Austria, where opposition to atomic energy has been the strongest, the arguments of those opposing nuclear power plants are slowly losing their effectiveness. Nuclear energy is demonstrably the only realistic way for us to go, and various types of nuclear power plants are expected to provide a major share of electric energy by the end of the century. Today there are some 240 nuclear power plants in the world with a combined output of 120,000 megawatts. An equal number of nuclear power plants are under construction and approximately 120 more are planned for the near future. This means that by sometime in the early 1990's there will be approximately 600 atomic power plants in operation providing 440,000 megawatts of clean electricity.

Participating in this trend to a significant extent are the socialist countries belonging to the Council for Economic Mutual Assistance. Thanks to the extensive help of the USSR, atomic energy in CEMA member states has completed its first "test years" in many member countries and has caught its breath for an energetic upsurge. At the end of last year, nuclear power plants were producing a total of 15,000 megawatts of electric power in the CEMA member states. This year these same plants will produce approximately 70 billion kilowatt-hours, last year's output from all of Czechoslovakia's power plants.

Projects under Construction

The tempo of nuclear power plant construction in the CEMA member states is picking up. Between 1973 and 1978, approximately 1,400--1,500 megawatts of nuclear power were commissioned annually within CEMA; last year, particularly thanks to 2 Soviet "1000's", this was up to 2,800 megawatts. Nuclear power plants are operating today in the USSR, the GDR, Bulgaria and the CSSR. The Hungarian atomic program has a large volume of uncompleted construction, and the foundation stones of their first nuclear power plants have been laid in Cuba and Poland. Rumania's power supply system too is entering the nuclear age with plans to erect six power plants.

A key role in CEMA's atomic power supply system belongs to the USSR, which has developed and is now offering to other socialist countries its own technology. There are a number of different types of reactors operating in Soviet power plants. The reactor that at this time best meets the needs of the other CEMA states appears to be the VVER-440 thermal-electron reactor; the first two reactors of this type are operating in Jaslovske Bohunice. Novovoronezh 440's will be built until approximately 1985 when the CEMA countries will switch to the similar but more powerful VVER-1000, which at present only the USSR has available and is testing.

The USSR is also building 1000-megawatt thermal-electron channel reactors with graphite moderators (in Leningrad, for instance), but these have higher investment costs. All types of thermal electron reactors have the drawback of consuming only about 1 percent of the fuel, 99 percent being wasted. A solution and a prospect for the future is offered by a reactor using fast neutrons, the so-called breeder reactor, which not only completely consumes the fuel but itself produces and multiplies it. A 12-megawatt BOR-60 breeder reactor has been in use in Dimitrovgrad since 1969, and a BN-350 reactor has been operating in Shevchenko since 1973, 200 megawatts of its output being used to desalinate water from the Caspian Sea for Mangyshlyak peninsula and the remaining 150 megawatts to produce electricity. The third and most powerful breeder reactor--600 megawatts--was built by the USSR as the third power unit of the Beloyarska atomic power plant. In the planning stage is a powerful breeder reactor, the BN-1600.

Other Plants

The other socialist countries, except Romania, are concentrating in this and the coming five-year plan periods on the Soviet VVER-440 light-water reactors.

CSSR: The second power unit of V-1 in Jaslovske Bohunice recently began operating, meaning that our nuclear power system now has available 880 megawatts. An additional 10 power units of this type have been contracted for. The first generation of nuclear power plants in this country, the VVER-440's, will thus have a total capacity of 5,280 megawatts. These power plants will be located in Jaslovske Bohunice, Dukovany and Mochovce. By 1990, additional power units having a combined output of 9,000 to 10,000 megawatts have thus to be built. It is projected that work on the first VVER-1000 should begin in Milovce in 1981.

GDR: The first power unit of the Bruno Leuschner power plant went operational in 1975. By 1983 the eighth and last unit of this massive power plant will be working, giving it a total output of 3,520 megawatts. At the same time the construction of another power plant is continuing in Stendal in Magdeburg district. The GDR wants to change over relatively rapidly to constructing fast-neutron reactors.

Bulgaria: In Kozloduy, 3 power units of a VVER-440 having a total output of 1,320 megawatts are already operational, and a fourth is due to be commissioned this year. Atomic energy will thus provide a full 20 percent of Bulgaria's electricity.

Hungary: In Paks the first of four power units of a Novovoronezh 440 reactor is approaching completion. At the 1,760-megawatt power plant there will soon be built other units, but of 1000-megawatt capacity.

Poland: Our neighbor to the north is basing its power industry on its abundant coal resources. Despite this fact, Poland also sees a future for nuclear power plants in that country. The first is projected for Zarnowce and should come on line in 1985. By 1990, Poland wants to have a nuclear energy output of 4,900 megawatts and thenceforth, until the end of the century, to increase this figure by an average of 1,500 to 2,000 megawatts annually.

Cuba is entering the atomic age of energy production with its laying of the foundations of its first VVER-440 power unit, and Romania intends to build 5 units of 600 megawatts each under Canadian license.

The socialist countries have thus decisively entered the field of atomic energy in the 1970's. For some of them, for example the CSSR and Hungary, this is only a starting point. Intensive cooperation in the areas of scientific research, training cadres to man the plants, and especially cooperation and specialization in the production of equipment for the power industry are all being adapted to this prospect. In this context the agreement on specialization and cooperation signed last year at the 23rd session of CEMA is of fundamental importance. The production of machinery for the nuclear power industry in the CEMA member states will expand during the 1980's so that by 1990 the construction of power plants generating a total of 37,000 megawatts will have been completed.

8805

CSO: 5100

INTERNATIONAL AFFAIRS

USSR-CSSR NUCLEAR COOPERATION INCREASES

First CSSR Nuclear Plant Opens

LD040813 Moscow PRAVDA in Russian 29 May 80 p 5

[TASS report under the rubric "From the Socialist Countries": "A Ceremonial Meeting"]

[Text] Bratislava, 28 May--The CSSR's energy potential will be greatly increased by the first Czechoslovak nuclear power station near the city of Jaslovske Bohunice, which has now become fully operational. It was constructed with assistance and technical aid from the USSR.

A ceremonial meeting was held today to mark this important event, with the participation of Czechoslovak and Soviet specialists. A greetings message from G. Husak, general secretary of the CPCZ Central Committee and president of the CSSR, was read out, stressing the importance of fraternal cooperation between the CSSR and the USSR in all spheres of life.

The construction of the first Czechoslovak nuclear power station, M. Hruskovic, candidate member of the CPCZ Central Committee Presidium and secretary of the Slovak Communist Party Central Committee, said at the meeting, is a shining example of the Soviet Union's assistance in developing the CSSR's national economy. He expressed cordial gratitude to the USSR Government and the Soviet people for the help in constructing this project.

A firm basis for the all-round development of the republic's national economy, the speaker stressed, is provided by the treaty on friendship, cooperation and mutual assistance between the CSSR and the USSR, signed in May 1970, which helps in successfully resolving the most important questions in the Czechoslovak economy and promotes the deepening of collaboration between the two fraternal states. He stated that Soviet experience will be used extensively in the construction of the second nuclear power station.

The participants in the meeting greeted with great enthusiasm the cordial congratulations of L.I. Brezhnev, general secretary of the CPSU Central Committee and chairman of the USSR Supreme Soviet Presidium, in connection with the completion of the construction and startup of the nuclear power station in the CSSR. The congratulations were conveyed to the working people by V.N. Novikov, deputy chairman of the USSR Council of Ministers.

The successful construction of Czechoslovakia's nuclear power pioneer is the result of the high professional skill, great organizational and political work, selfless labor and creative initiative of all who took part in the construction work, he said. Extensive socialist competition in honor of the 110th anniversary of V.I. Lenin's birth and the 35th anniversary of Czechoslovakia's liberation from the fascist occupiers made it possible to achieve outstanding work indicators. Fraternal Soviet-Czechoslovak collaboration will continue to expand.

New Accord Signed

LD041531 Moscow PRAVDA in Russian 31 May 80 p 5

[TASS report: "Talks End"]

[Text] Prague, 30 May--Soviet-Czechoslovak talks on cooperation in the sphere of nuclear energy, in which a Soviet delegation headed by V.N. Novikov, deputy chairman of the USSR Council of Ministers, and a Czechoslovak delegation headed by J. Simon, deputy premier of the Czechoslovak Socialist Republic, took part, ended here today.

A protocol was signed on the results of the talks. The document makes provision for the further deepening of cooperation in the construction of new nuclear power stations in Czechoslovakia and the development of specialization and production-sharing between the two countries in the production of equipment for nuclear power stations.

Further Details

LD302036 Prague Domestic Service in Czech 1630 GMT 30 May 80

[Text] Talks on Soviet-Czechoslovak cooperation in nuclear energy ended in the state castle in Prague-Kolodeje today. According to a program, cooperation between both countries in the development of nuclear energy in Czechoslovakia will, in the period to 1990, be further intensified and will assume increasingly specific features. Czechoslovak-Soviet cooperation in the construction of further nuclear powerplants, whose specific development was also discussed during the talks, will be of great significance for our national economy. Further prerequisites are also being created for the extension of Czechoslovak-Soviet cooperation in the manufacture of equipment for nuclear powerplants by means of coordination. In the sense of the measures adopted, documents on mutual cooperation in the construction of nuclear powerplants and the manufacture of equipment for the nuclear energy sector were also signed between the relevant ministries of both countries controlling this sector.

CSO: 5100

TLATELOLCO RATIFICATION MOTIVES, GAINS REVIEWED

Safeguards Issue

Buenos Aires CLARIN in Spanish 13 Jun 80 p 6

[Article by Luis Sartori: "Safeguards--The Key"]

[Text] The document banning the spread of nuclear weapons to Latin America, which will shortly be ratified by Argentina, includes an article which contains one of the keys to enabling Argentina to assure itself of an independent future in the strategic atomic area.

The article in effect specifies that "Each contracting party shall negotiate multilateral or bilateral agreements with the IAEA for the implementation of the latter's safeguards to its nuclear activities."

The topic of safeguards was in recent months the subject of many conversations with foreign representatives in connection with the contracts for the construction of Atucha II and the heavy-water plant at Arroyito which were signed--following a long period of uncertainty marked by speculations--with West German and Swiss companies.

This is not a gratuitous step. Argentina is considered one of the nations that are at the doorstep to the exclusive Nuclear Club, made up of those countries which have already exploded the "bomb." Although, for the purpose of making this very clear, Argentina has not given any indications whatsoever that it has any intention of doing so, it is viewed with much fear by the other developed countries in this field because it has an enviable technological level in this matter--enviable with regard to more than just one country.

The system of safeguards precisely sprang up as a way of controlling the utilization of atomic installations and assured the international community that the intentions of the respective countries which harbor them will be absolutely peaceful. The IAEA is operating under the United Nations in order to implement this provision.

It must be noted however that this form of control over the use which each country makes of nuclear equipment, both the equipment purchased abroad and the equipment made at home, is based on the much talked-about nuclear NPT, an international standard which Argentina does not subscribe to. More than that, Argentine officials on various occasions stated that there is not the slightest intention to sign it because it is believed to have a definitely proscriptive character as far as the nuclear development of nations not included in the Club of London is concerned.

This attitude is quite in keeping with the independent line that was chosen and it has meant that Argentina accepts and as a matter of fact does have nuclear installations subjected to certain IAEA safeguards but not all.

This has also meant that Argentina periodically ran into obstacles every time it had to go to the atomic powers in order to obtain material that was indispensable in the search for the ever closer mastery of the fuel cycle which definitely signifies access to a technology sufficient to move on the road of sovereign activity.

The United States, Canada, and West Germany have on various occasions placed obstacles in Argentina's way for the sake of "nonproliferation," thus preventing, through their determination or as a result of pressures, a smooth vertical transfer in favor of Argentina; this is what the developed countries are offering in the nuclear field to those that have not reached that level.

The topic of safeguards, as we remember, assumed special significance early this year when Gen Andrew Jackson Goodpaster of West Point came to Argentina, along with the nuclear expert Gerard Smith; these men had been sent by President Carter to Buenos Aires to consider, among other things, the at that time rather controversial nuclear relationship between Argentina and the United States.

Following these trips--in the light of the closer relations that materialized between the two countries--the topic again began to sail in somewhat calmer waters.

The crux of this ticklish issue appears in Article III of the Nuclear NPT. It specifies that its signers are subjected to "safeguard procedures" concerning "all basic materials and special fissile materials, not only if they are produced, processed, or used in any principal nuclear plant but also if they are outside any installation of that kind."

It must be explained here that the safeguards begin to be applied at the point when the nuclear materials reveal a makeup and purity adequate for their enrichment in an isotope separation plant (capable of performing a nuclear reaction) or for manufacturing fuel elements with them.

This complex system for safety (although it is rather relative because as much as 10 percent of sensitive material could remain beyond the reach of these safeguards) and for pressure, at the same time, will have to be a subject of negotiation between Argentina and the IAEA. The negotiations will cover heavy installations, both present and future. Whether they will cover all installations is the big unknown to be determined and it also constitutes the master key for the future. Last year, the National Atomic Energy Commission chairman said: "If Argentina can make sure that the entire technology it needs will be supplied to it, then it could consider total safeguards. This is a conflict between guarantees of technology transfer versus a pledge to use materials for peaceful purposes. So far, safeguards have always been imposed and the technology supplier countries made good on their promises only very few times."

Ratification Imminent

Buenos Aires CLARIN in Spanish 13 Jun 80 p 7

[Article by Oscar Raul Cardozo: "Acceptance Inevitable"]

[Text] The Argentine military government has decided at last to take a step in its foreign policy which was postponed intentionally for a long time even though it was known that it would be inevitable after the options involved concerning the continuity of its nuclear plan had been analyzed; it will ratify the Treaty Outlawing Nuclear Arms in Latin America, in other words, the Tlatelolco Treaty, named for the Mexican town in which it was drafted early in 1967.

The announcement made by Vice Adm Carlos Castro Madero, Chairman of the National Atomic Energy Commission, early this week, also indicated some limitations for the immediate future in mentioning the need for complying with "some prior steps" before filing the final documents.

These "prior steps" contain the key to the political value of ratification.

Before analyzing them, we must recall that Argentina signed that treaty at the very beginning and that it pledged to ratify it in November 1977 during the visit to Buenos Aires by former Secretary of State Cyrus Vance.

But this final step was postponed while San Martin Palace and the CNEA [National Atomic Energy Commission] used it as a negotiating instrument in dealing with the countries that supply installations and "sensitive technology"--countries which for many years have with apprehension, and consequently, with pressure, been watching the "independent-oriented" philosophy implemented in that area by Argentina.

Argentina's ratification of the Tlatelolco Treaty above all else is one of the most important issues pending in relations between Argentina and the United States which Washington has tried to clear up ever since it accepted

the fact that Argentina would not sign the Nuclear NPT which it considered an instrument of discrimination against the developing countries.

If those "prior steps," alluded to by Castro Madero, were not taken, then ratification would have a merely symbolic value due to the fact that Argentina would go ahead--like Brazil and Chile--without observing the necessary "exemptions" required by the Tlatelolco Treaty, according to its Article 28, in order to acquire the kind of effectiveness which it does not yet have.

Argentina would have to provide the following "exemptions":

- (a) That it was ratified by all sovereign Latin American states (Guyana cannot be included because of its border dispute with Venezuela and Cuba has decided not join so long as the United States does not pull out of the Guantanamo base);
- (b) That the continental and extracontinental nations which, de jure or de facto, have territories within the area of the treaty's application (Latin America) ratified the Additional Protocol I attached to that treaty;
- (c) That the powers that have nuclear arms sign and ratify Additional Protocol II, pledging not to attack, with nuclear arms, the contracting parties and that the same would apply to those countries which in the future may achieve possession of that type of armament, and that, without said requirement, the treaty is automatically suspended for countries which ratified it without granting that condition;
- (d) That all signatory states entered into the safeguard agreements with the IAEA (which is under the United Nations).

Until these requirements are complied with--or until Argentina agrees to comply with any or all of them--the provisions of Tlatelolco shall not be in effect.

Over the past 2 years, more and more countries signed the two protocols--especially the United States, the USSR, and France, among others, but nobody knows what other emerging powers will do, such as India, which has given no indication of wishing to sign Annexed Protocol II.

The key is to be found in the last point because, according to Article 18 of the treaty, each contracting party must negotiate bilateral or multilateral agreements with the IAEA "for the implementation of the latter's safeguards in its nuclear activities."

Although there is a deadline of 180 days for these negotiations--from the date of the ratification of the Tlatelolco Treaty--and 18 months for the results to become effective, it is not wrong to say that conversations for delimiting the "safeguards," which Argentina would accept, have already been started.

Beyond the legal aspects and the bureaucratic processing requires, this constitutes the most important "prior step" leading up to ratification.

It is not difficult to figure out why the moment of Tlatelolco has arrived for Argentina: In some way, these negotiations on the "safeguards" will have to be carried on if one wishes to eliminate the obstacles on the country's way toward Atucha II and the heavy-water plant.

The symbolic value of this however must not be overlooked either. Argentina will join Tlatelolco in a pact which will create the first zone to be free of nuclear weapons anywhere in the world as a result, not of a "suggestion" by the powerful nations, but due to an entirely Latin American effort.

Technical, Political Gains

Buenos Aires CONVICCION in Spanish 12 Jun 80 p 10

[Article by Martin Olivera: "Technical and Political Significance of Tlatelolco Treaty Ratification"]

[Text] The confirmation, by Vice Adm Carlos Castro Madero, Chairman of the National Atomic Energy Commission, of the story printed by CONVICCION in its edition of Saturday, 7 June, with respect to the measures that are being taken to enable Argentina to ratify the Tlatelolco Treaty, requires an analysis of the political and technical significance of that decision.

It is obvious that the document's ratification is an eminently political step, with political objectives, but to permit that ratification, it is necessary for us to be sure that it will not influence the technical aspects behind the independence of the Argentine nuclear plan.

In this respect, Article XIII is a key point in the treaty; it reads as follows verbatim: "Each contracting party shall negotiate multilateral or bilateral agreements with the International Atomic Energy Agency for the application of the latter's safeguards to its nuclear activities."

The CNEA [National Atomic Energy Commission] harbors a certain amount of distrust to the effect that the safeguards which the IAEA wishes to impose will not be those in the Tlatelolco Treaty but rather those in the Nuclear NPT which Argentina does not accept in any way whatsoever because of its discriminatory features.

This lack of confidence springs from the attitude assumed by the IAEA toward the safeguards for the Embalse plant since the agency "delayed" its report to such a point that one may suspect that the delay was not accidental but rather intentional in an effort to disturb the operation, something which triggered complaints in the United Nations. To prevent a repetition of these events, especially if Argentina were to ratify Tlatelolco, the CNEA

is now negotiating with the IAEA for the purpose of obtaining the guarantees necessary with regard to which safeguards are to be implemented.

In the case of Argentina, this is a matter of the utmost importance because Argentina is the Latin American country which has the most advanced autonomous nuclear development--as a matter of fact, it is the only one which, because of its independence, does trigger reactions--which is why the superpowers do not view its atomic policy and its confrontation with the Atomic Club with pleasure.

At any rate, politically speaking, it is better for Argentina to ratify the Tlatelolco Treaty because, even though only in part, this would manage to calm certain spirits, especially in Washington, at a time when the position of the White House is beginning to be more flexible within the entire range of bilateral relations.

Another point that requires greater consideration is Article V which states: "For the purpose of this treaty, the term 'nuclear weapon' shall be understood to refer to any device capable of releasing nuclear energy in an uncontrolled manner and revealing a group of features suitable for employment for belligerent purposes."

Although, Article XVII clearly states that "None of the provisions contained in this treaty ignore the rights of the contracting parties to use nuclear energy for peaceful purposes in conformity with this instrument," nobody can fail to note that the strict implementation of Article V can--if the IAEA so wishes--interfere with the implementation of the latter.

Interference can especially result through Article XVIII which notes that "The contracting parties may conduct explosions of nuclear devices for peaceful purposes--including explosions which involve devices similar to those used in nuclear armaments--or they can give their cooperation to third parties for the same purposes, provided they do not violate the provisions of this article and the others in the treaty, especially the provisions of Articles I and V." Of course, that requires a long series of explanations that must be given to the IAEA.

Problems can arise because, right now, the construction of nuclear devices for belligerent purposes is not a technical problem but a policy decision, in other words, if a country--let us assume Argentina--with considerable development in the field of nuclear energy for peaceful purposes, should decide to turn its efforts toward the construction of weapons of war, it would be able to do so.

Hence, it is very difficult to determine which elements are for peaceful uses and which are for belligerent uses because the latter boil down to a problem of intention. Argentina has already asserted on countless occasions that it has no interest in nuclear armaments but if the IAEA

wishes to insist on not believing that--as it is doing so far--it may well use the Tlatelolco Treaty to interfere.

This is why it is absolutely indispensable for the CNEA to look into the whole matter very carefully, even though it takes some effort to believe that the superpowers will not use the opportunities provided for in the Tlatelolco Treaty.

To get around these possible inconveniences, Argentina will probably fall back on Article 28 which outlines the conditions through which the agreement will take effect.

One of the paragraphs in that article indicates, as one of the requirements, the "signing of bilateral or multilateral agreements on the application of the IAEA Safeguard System in accordance with Article XIII," which is precisely what the CNEA is negotiating on with the IAEA.

If no agreement should be arrived at regarding this point, there is a possibility of falling back on point II in Article 28 which says: "It shall be the imprescriptible option of every signatory state to drop in whole or in part, all of the requirements established in the preceding paragraph, through a statement which comes in the form of an annex to the respective ratification instrument and which can be drafted at the moment the instrument is filed or afterward. For countries that avail themselves of this opportunity, this treaty shall become effective upon the filing of the declaration or as soon as the requirements, whose exemption has not been expressly declared, have been complied with."

In summary, Argentina can ratify Tlatelolco but if there is no agreement on safeguards, it can use that point in order to make sure that it will not take effect, in other words, that it would join only half-way.

5058

CSO: 5100

TLATELOLCO TREATY RATIFICATION TO ADVANCE NUCLEAR EFFORTS

Buenos Aires LA PRENSA in Spanish 17 Jun 80 p 8

[Editorial: "Ratification of Tlatelolco Treaty"]

[Text] The chairman of the CNEA (National Atomic Energy Commission) announced that Argentina is adopting various measures intended to ratify the Tlatelolco nuclear nonproliferation treaty. In this connection, VAdm Castro Madero said that negotiations are going on with the IAEA as the final step prior to having the executive branch confirm its commitment on this matter.

The Tlatelolco Treaty was signed in the capital of Mexico on 14 February 1967 by Bolivia, Colombia, Costa Rica, Chile, Ecuador, El Salvador, Guatemala, Haiti, Mexico, Nicaragua, Panama, Peru, Uruguay, and Venezuela. This instrument was later on signed by another seven countries, including Argentina, Brazil, and Paraguay.

The United Nations General Assembly approved the treaty in December 1967, with a vote of 82 countries in favor, none against, and 28 abstentions. The document and its additional protocols stress the intention of contributing, the extent possible, to putting an end to the arms race, especially nuclear weapons, and the consolidation of a world of peace based on the sovereign equality of states, mutual respect, and good will. For this purpose, the international organization unanimously approved a program which includes "the total prohibition of the employment and manufacture of nuclear weapons and all kinds of mass destruction weapons." It was believed at the time that nuclear weapons--whose terrible effects without distinction and inevitably hit both military forces and the civilian population, because of the persistence of radioactivity which they generate--constitute an attack on the integrity of the human race and in the end may even make the earth uninhabitable.

The subsequent ratification of the agreement was ordered by 19 countries, which did not include Argentina; concerning this fact, the CNEA chairman declared last December that the "safeguards," imposed in Article 13 of the document, were considered "discriminatory" by Argentina since "they violate

the principle of legal equality of all states." In March, VAdm Castro Madero said that, among other topics which the IAEA will have to take up, "the most important one is to establish the instruments that are suitable for rebuilding mutual confidence between suppliers and receivers and to spell out international mechanisms for facilitating the access of developing countries to the use of nuclear energy for peaceful purposes."

The Argentine attitude caused objection among various nations which are potential suppliers of material and equipment intended for the construction of nuclear power plants in Argentina, including Switzerland and West Germany. In backing this national decision, Argentina repeatedly demonstrated its peaceful intentions, signing binational cooperation agreements with various governments. Besides, all government statements emphasized those goals connected with the installation of local power plants and the above-mentioned need for preventing any fears on the part of any powers.

The recent government decision to ratify the Tlatelolco Treaty would mean that the obstacles have been overcome; and this is a fact of singular importance since it will eliminate obstacles that hinder Argentina's nuclear development. In spite of these difficulties, Argentina has done a tremendous job in continuing its activities with firm determination and perseverance in order to break away from foreign dependence since the country has unique volumes of raw materials to support the entire system which is why the country only needs to build plants which in the future likewise will be built on a local basis.

Under current international circumstances, the creation of nuclear power plants in Argentina is indispensable to supplement the energy supply which is being attained by other means, thus establishing self-sufficiency in the national system and at the same time making it possible to provide technical assistance to other countries.

The ratification of the Tlatelolco Treaty will facilitate those efforts which undoubtedly have general support, thus justifying the efforts made so far toward these goals.

5058

CSO: 5100

FRG RECEIVES ASSURANCES OF PEACEFUL AIMS

Buenos Aires CLARIN in Spanish 13 Jun 80 p 6

[Text] Argentina assured the FRG of the peaceful nature of its nuclear program in a new statement designed to make sure that West Germany would supply a third nuclear plant, the AFP [French Press Agency] reported yesterday from Bonn.

According to well-informed sources in Bonn, the "safeguards" which Argentina mentioned are contained in an exchange of notes between the government in Buenos Aires and Bonn through which the KWU (Power Plant Union) the nuclear affiliate of Siemens, was authorized to sign a contract for supplying Argentina with a 745-Megawatt reactor using un-enriched uranium.

The reactor and the heavy-water plant (necessary for cooling and moderating nuclear fission)--the latter to be supplied by a Swiss company--will make up the Atucha II power plant which will be located at San Pedro, province of Buenos Aires.

It must be remembered that, ever since the start of negotiations with Bonn, concerning the problem of nonproliferation of materials capable of being used in making atomic weapons, Argentina confirmed its refusal to accept total control over its current or future atomic program.

This control, called "de facto full-scope safeguard" (complete intensified protection) is exercised through the IAEA with headquarters in Vienna. However, the government in Buenos Aires agreed that, in the case of Atucha II, the IAEA could perform "normal controls."

But there are also political reasons why the government in Bonn asked for "assurances" from Buenos Aires. The latter came up after Washington expressed reservations and stated that IAEA controls, limited to the Atucha installations, are insufficient.

BRIEFS

ATUCHA II STAFFING--The National Executive Branch has authorized the National Atomic Energy Commission to appoint and hire the personnel required for the performance of the various activities connected with the second nuclear power plant to be built in the area called Atucha, district of Zarate, province of Buenos Aires. The activities mentioned are those which are connected with the design, construction, purchase of goods and services, assembly, start-up, reception, operation, and maintenance of the future atomic power plant. The pertinent decree, published yesterday in *BOLETIN OFICIAL*, also points out that this step likewise involves the supplementary facilities for the production of nuclear fuel which are located in the atomic center at Ezeiza. The agency was also authorized to establish delegations abroad during the time required for the management, supervision, and coordination of work to be done for the construction of the second power plant at Atucha. The decree notes that the National Customs Administration will authorize the entry of goods on a temporary basis "and that everything concerning the completion of the second nuclear power plant will be handled by the National Atomic Energy Commission." The construction of the Atucha II atomic power plant, the third one in the country, was recently contracted for with West German enterprises. Swiss firms will build a heavy-water production plant to supplement the project. [Text] [Buenos Aires LA OPINION in Spanish 28 May 80 p 9]5058

LITHIUM RESERVES--"Large accumulations of lithium and potassium, much bigger than those of the few countries that have those valuable materials, were discovered in the region of Puna," said Dr Hugo Nicolli, member of the National Space Research Commission, during a lecture at Cordoba. He outlined the result of research conducted by the agency as part of a cooperative effort with Fabricaciones Militares and he explained that, as a result of the worldwide energy crisis, "lithium is of enormous strategic importance because it is the fuel needed for atomic fusion reactors." He noted that this type of reactor "will soon be operated commercially" and that there are other, similarly important uses for lithium. "The deposits detected in Puna," he indicated "by far exceed the known reserves in Cordoba and San Luis," after which he gave some specific geographic details. "There are salt mines, salt flats, or huge lagoons in the lower portions of Puna and in the subsoil of these salt flats, the underground water is a brine generally saturated with sodium chlorite which contains up to more

one gram of lithium per liter and up to more than 10 grams of potassium per liter, plus variable proportions of magnesium sulfate and borate." This means that the lithium contents are "more than twice as big as those currently operated commercially in the United States," something which would make domestic production competitive. [Text] [Buenos Aires LA NACION in Spanish 10 Jun 80 p 17] 5058

CASTRO MADERO IN YUGOSLAVIA--Vice Adm Carlos Castro Madero, Chairman of the CNEA (National Atomic Energy Commission) is in Yugoslavia to negotiate on cooperation between Argentina and Yugoslavia concerning the peaceful use of nuclear energy. During the first part of his visit, Castro Madero conducted talks with his counterpart, Stojan Matkalijev, Chairman of the Federation Committee on Energy and Industry. During the talks, they discussed the possibilities of cooperation between both countries both on a bilateral level and on a multilateral level in the field of peaceful uses of nuclear energy, primarily for the purpose of generating electric power. They also took up the possibilities of stepped-up action by the nonaligned countries and the developing countries regarding the use of nuclear energy for peaceful purposes. Both parties agreed on the need for adequately covering this problem complex during the next meeting of coordinators of nonaligned countries for nuclear energy which will be held in Buenos Aires at the end of June. [Excerpts] [Buenos Aires CONVICCION in Spanish 14 Jun 80 p 12] 5058

CSO: 5100

KUWAIT

BRIEFS

FRENCH NUCLEAR REACTOR PURCHASE—Shaykh Saad al-Abdullah al-Sabah, crown prince and prime minister, announced that Kuwait is arming itself militarily with Mirage jets (though not in the quantity estimated by some sources), and is arming itself in the civilian domain with a nuclear reactor of French manufacture. He emphasized that the security of the Gulf is the responsibility of the state, far from any foreign intervention. He said this in an interview with Monte Carlo Radio. He said that Kuwait welcomed and supported the Iraqi pan-Arab charter, and will support any Arab gettogether on issues of Arab destiny. Kuwait likewise supports drawing up a unified military and political strategy. [Text] [Beirut AL-DIFA' AL-'ARABI in Arabic 8 May 80 p 16] 9397

CSO: 5100

DATA ON SMTT'S PRODUCTION, CAPITALIZATION SET FORTH

Niamey SAHEL HEBD' in French 9 Jun 80 p 15

[Article signed A.M. : "The Tassa N'Taghalge Mining Company, SMTT"]

[Text] SMTT (Tassa N'Taghalge Mining Company) is characterized by our country's large participation to its capital, which is shared equally with COGEMA (General Company for Nuclear Materials) [industrial branch of French AEC]. This share ownership will result in substantial returns to the national treasury and in the creation of some 800 new jobs. SMTT ranks third in the exploitation and marketing of uranium, after SOMAIR (Mining Company of the Air) and COMINAK (Akoufa Mining Company).

A third mining company has been created in the Niger, following SOMAIR and COMINAK. SMTT is expected, in principle, to get into production in the first semester of 1984.

It will exploit deposits located some 4 km southeast of Arlit mine, which cover approximately 37.2 sq. km.

An expected 35,000 metric tons of uranium are contained in these deposits which will be exploited at the rate of 1500 to 1800 metric tons per year.

The State of Niger (through ONAREM, National Office for Mining Resources) is holding 50 percent of the initial capital of 7 billions CFA francs, with the other 50 percent held by the French COGEMA (General Company for Nuclear Materials) [industrial branch of French AEC].

With the creation of the Tassa N'Tafhalge Mining Company some 800 new jobs will be created and the state revenues will increase markedly.

The fact that Niger holds 50 percent of the SMTT capital should be noted. This is an indication of our increased participation in mining companies. At the beginning with the SOMAIR, it was 8 percent, which was later increased to 16 percent and then 33 percent; reaching 50 percent now with SMTT.

The SMTT administration board comports 12 members, which include 6 Negeriens.

(It was previously of ten members, with five Negeriens). They are: Mr Adamou Mayaki, SMTT vice president, Mr Boubakar Sori, mines and geology director, Mr Sani Koutoubi, ONAREM director, Mr Ibrahim Tampone, industry director at the Ministry for Industry, Trade and Economic Affairs, and Mr Jacques Nignon, general treasurer. The sixth Negerien member will be a representative of the State Plan.

Relative Position of the SMTT in Our Mining Industry

Third mining company to be created in the Niger, SMTT importance will be more in terms of the large participation of our country than in terms of its available deposits, which are estimated only at 35,000 metric tons (projected). This participation will result in a more substantial contribution to the national treasury.

While SMTT will produce annually some 1500 to 1800 metric tons of uranium, the SOMAIR exploitation is producing approximately 2000 metric tons per year and the underground deposits of COMINAK contain some 40,000 metric tons.

It should be noted that Niger uranium reserves are evaluated at 100,000 metric tons. The most important deposits are at Imouraren, which contain reserves close to 70,000 metric tons. They are located some 100 km south of Arlit. These underground deposits will be surface exploited, with some eventual underground mining.

Production could exceed 2500 metric tons per year. Feasibility studies are in progress. The State of Niger would own 30 percent of capital in the exploitation company.

Among other projects, Afasto-West and Techeli can be mentioned as those which could be started in the near future.

9627

CSO: 5100

SOUTH AFRICA

PELINDABA PHYSICISTS EXPERIMENT WITH HOT PLASMA

Johannesburg RAND DAILY MAIL in English 25 Jun 80 p 5

[Text] Cape Town--Physicists at the Atomic Energy Board have placed a South African genie in a Russian magnetic "bottle" and held it there long enough to prove that man may one day command the genie to give energy.

In a tight-lipped statement this week, the board said: "The plasma physics group recently succeeded in achieving a stable plasma in a Tokamak device designed and built in South Africa."

Behind this statement lies the kind of research that is the stuff of science fiction--work on an advanced energy machine using material as hot as the sun and containable only by enormously-powerful magnetic fields.

Known as the Tokamak, a device of Russian origin, it has held the attention of physicists since the 1960s.

Six years ago the Atomic Energy Board began its research programme on hot plasma and built a Tokamak device at the Pelindaba research centre.

And it was promptly named "Tokoloshe."

The process involved is nuclear fusion--the heating of material to 100 000 000°C and more--temperatures found only in the heart of the sun or at the moment of explosion of a hydrogen bomb. Hence the need for a magnetic "bottle" to keep the hot plasma away from the solid outer container.

But once these conditions have been achieved it is possible to use a fuel which is obtainable from seawater. The fuel, Deuterium, has world reserves which will last at least one million years--even at 10 times the present rate of energy consumption.

CSO: 5100

BELGIUM

BRIEFS

POWER PLANT SHUTDOWN--There was a steam leak in the conventional section of the Doel II nuclear power station this morning. According to the Belgian Electrical Enterprises Union, a valve opened accidentally during maintenance work. The station was shut down and the leak was stopped after about 1 hour. The Electrical Enterprises Union said the steam leak had no effect on the staff or on the environment. As a precaution, work at the Doel II site was temporarily interrupted. Doel II will resume operations after the necessary repairs and checks have been made. Doel I is functioning normally. [Text] [LD161700 Brussels Domestic Service in French 1600 GMT 16 Jun 80]

CSO: 5100

DUMPING RADIOACTIVE WASTE IN ATLANTIC PROTESTED

The Hague ALGEMEEN NEDERLANDS PERSBUREAU in English 20 Jun 80 p 5

[Text] The Hague, June 19--A Dutch ship tonight began dumping into the Atlantic Ocean 5,700 tonnes of concrete-lined steel drums containing radioactive waste, a Health and Environment Ministry spokesman here said.

The Rotterdam-registered "Andrea Smits" sailed from Zeebrugge on Monday with a cargo of low to moderately-radioactive waste from hospitals, laboratories and nuclear power stations in Belgium, Luxembourg and Switzerland.

The spokesman said the 1,599-tonne vessel would take about five days to dump the barrels about 400 miles southwest of land's end, England. Permission for the operation has been granted by Health Minister Leendert Ginjaar.

The London-based ecological organisation Greenpeace blockaded the "Andrea Smits" in the Dutch harbour of IJmuiden for one day last week, and in Zeebrugge protestors boarded the ship and damaged some of its instruments.

The spokesman said that dumping at sea remained by far the best way to dispose of radioactive waste, but noted that Mr Ginjaar had agreed to appoint a commission by October to investigate alternative methods. The material being dumped by the "Andrea Smits" is largely contaminated clothing and equipment and is not waste from the nuclear fission process, he added.

CSO: 5100

AREA CITIZENS ORGANIZE TO HALT TEST DRILLING FOR N-WASTE

Stockholm DAGENS NYHETER in Swedish 30 May 80 p. 27

[Article by Cecilia Steen-Johnsson]

[Text] The local population of the Kynne Mountain area is guarding the unique mountain area in the eastern Bohuslan night and day. It is here that the power companies want to undertake test drilling to find out if the mountain is suitable for the deposit of radioactive waste from the Swedish nuclear power plants. But the opposition to the depositing of nuclear waste is well prepared.

The Kynne Mountain is a unique area with a scenery which reminds one of the lower Lappland mountains. This is the southernmost area of the country in which mountain birch grows. There is a rich bird life and animal life in the swampy fields of the mountain.

The Kynne Mountain forms the watershed between Bohuslan and Dalsland. Several municipalities get their water from lakes below the Kynne Mountain.

"We can mobilize up to 400 people at a very short notice," says the spokesman for the action group Save the Kynne Mountain, Bengt Nyberg, carpenter. "We do not want any deposits of nuclear waste in the Kynne Mountain, the area is much too vulnerable from many points of view."

"The plans are to build a big plant up here," says Erik Johansson, one of the guards of the mountain.

"That we cannot accept. The danger of radioactive contamination of the subsoil water is too big. Why do they not put the radioactive waste above the surface of the earth so that they can keep it under supervision?"

During the week, retired people and housewives keep guard in trailers in various places of the mountain. They keep an eye on the five planned drilling spots and guard all imaginable access roads.

"We also have people who report on suspected transports on the big roads and who report to us if any helicopters should approach," says Erik Johansson. "They have to bring the heavy drilling equipment here by helicopter. The terrain up here is too difficult."

Via Radio

The guards report on any suspected vehicles via communication radios. Occasionally, they patrol the area around the drilling spots.

Some weeks ago, people from the Heavy Geotechnical Drilling Institute came to prepare the place of work.

"We quickly mobilized about a hundred opponents," says Karl-Erik Fredriksson. The people from the Heavy Geotechnical Drilling Institute could not do much. They merely fenced in the area. Later on, they had to leave. We were in their way."

Stop Signs

The stop signs around the drilling spots say No Admittance Except for Authorized Personnel to Place of Work.

"There will be no place of work here," says Karl-Erik Fredriksson. "We want to keep the mountain as it is."

Kynne Mountain means the Cow Mountain in the Bohuslan dialect. Cows previously grazed freely all over the mountain. There are still farms on the Kynne Mountain.

"Why do people in the thinly populated areas have to be forced to accept waste of this kind," Aldor Jarlkvist wonders. "They should instead deposit the waste in the vicinity of the nuclear power plants, where the risks exist."

Protests

The three municipalities which may become affected by deposits of nuclear waste in the Kynne Mountain--the Munkedal, Tanum and Ed municipalities--have all of them protested against the test drilling.

"But the municipalities have got no right to veto test drillings," says Bengt Nyberg. "And they now want to do completely away with the municipal veto. The local population will then have to resist."

"We are doing the same thing as the people in Solvbacka," says Erik Johansson. "We oppose it."

The atmosphere in the trailer is relaxed. The three people who keep watch together during the 12 hours chat about nuclear power and about politics. They are all of them retired and are on their own time. But they do not, for a moment, neglect keeping an eye on the road outside.

Unlawful Interference

"The people from the Steering Committee on Radioactive Waste Disposal refer to it as unlawful interference," says Bengt Nyberg.

"I want to know what they mean by that. We want to protect the environment, a popular recreational area, against interference. Parts of the Kynne Mountain have already become nature reserves, and the National Swedish Nature Conservancy Board is planning to expand the nature reserve. But the Kynne Mountain has now become interesting from an economic point of view, as a result of which the nature conservancy plans now have got low priority."

The action Save the Kynne Mountain started last summer during a big protest meeting on the mountain, where Olof Johansson made a speech. After the referendum in March, the people started mobilizing seriously. Now, nobody is thinking of leaving the mountain voluntarily.

Do not Want to Drill Under Police Protection

"We are, of course, interested in having the test drilling started as soon as possible, but we do not want to work under police protection."

The above statement was made by Nils Rydell of the Steering Committee on Radioactive Waste Disposal on the occasion of the guarding of the Kynne Mountain by the local population.

"Of course, they are entitled to be on the Kynne Mountain, but they have not got the right to halt the test drilling. Preventing the helicopters from getting the equipment to the mountain, the way they did it, that I call unlawful interference."

The Steering Committee on Radioactive Waste Disposal will now discuss internally how to start the test drilling despite the present action. So far, they do not want any police intervention. Nils Rydell does not want to say what will happen if the action group does not give in.

Lennart Samuelsson of the Geological Survey of Sweden at Gothenburg says that the big problem is the categorical distrust on the part of the action group of the work of the Geological Survey of Sweden and of the Steering Committee on Radioactive Waste Disposal.

"We have explained that the Kynne Mountain is interesting at the initial stage because the mountain rock there crops out. This makes the tests easy to carry through, and we shall get to know better how to use the equipment correctly."

"The possibilities of finding other areas suited for waste disposal increase the more experience we get. But the local population will not run the risk that the Kynne Mountain might eventually be considered the most suitable spot."

Lennart Samuelsson says that the Swedish people must accept the responsibility for the nuclear power now that they have decided to use it. But, at the same time, he says that one has got to respect people's fears for the future.

"It is possible that the action group believes Nils Rydell when he says that the test drilling does not imply that the Kynne Mountain, of all places, will be selected. But they know, at the same time, that he cannot make any promises as to the future actions of the government and the power companies," Lennart Samuelsson says.

Electricity Costs to Be Increased if Nuclear Power Plants Are Demolished

It will cost approximately 25 billion kronor to handle the nuclear waste from the Swedish nuclear power plants and to demolish the nuclear power plants.

These costs will have to be paid via the electricity charges.

An amount of 1.5 ore per kilowatthour will have to be allocated to a fund which, in the future, will have to defray the costs of waste disposal and liquidation.

This appears from a report on radioactive waste disposal of nuclear power plants, prepared by the so-called Steering Committee on Radioactive Waste Disposal, which, last Thursday, submitted its final report to Energy Minister Carl Axel Petri.

The Steering Committee on Nuclear Waste Disposal has had two alternatives in mind: reprocessing of the waste to win plutonium and uranium, and direct deposits of the waste, i.e. all wastes from the operation is buried in the ground.

By the year 2060, the waste disposal question will have to be solved--by that time the location and the method for burial and storage of the waste without risks for hundreds of thousands of years will have to be found.

The most expensive alternative, according to the report, is reprocessing of the waste.

Uranium and plutonium will be sold. The costs have been estimated at 25 billion kronor.

According to the report, direct depositing will be less costly--around 20 billion kronor.

At present, nuclear power companies allocate 1 ore per kilowatthour for waste disposal.

There ought to have been 1,310 million kronor in funds for future waste storage, but there are only 790 million kronor, which means that the power companies will have to raise the allocation.

The funds will be kept index-tied until the year 2060.

The Steering Committee on Nuclear Waste Disposal will not decide how and where the final storage will take place. That is a question which has not been solved anywhere in the world, and the Steering Committee on Nuclear Waste Disposal states that much research must be undertaken for billions of kronor to solve this problem in the future.

7262

CSO: 5100

POWER FIRM DEMANDS GOVERNMENT COMPENSATE FOR DELAY

Stockholm SVENSKA DAGBLADET in Swedish 31 May 80 p 5

[Text] Vattenfall will receive 871 million kronor in damages from the government for the delay of Ringhals 3 and 4 in consequence of the anti-nuclear power debate.

The amount is preliminary and applies to 2 years only. Vattenfall will later on submit additional claims for damages.

Also the Forsmark power group will receive damages for its delays. The Forsmark power group is still negotiating damages for Forsmark 1, 2 and 3 with the government negotiator, Åke Englund, chief of the National Swedish Price and Cartel Office. Forsmark chief Erik Borgman hopes to have an agreement ready in June.

The Oskarhamn power group has recently requested negotiations for damages for Oskarhamn 3. The government has not yet responded to the claim.

The claim for damages concerns the six reactors which are still not in commercial operation. Two acts provide the power companies with the right to damages for the delay of these reactors, viz. the Nuclear Power Plant Act [the Act relating to the terms and conditions governing the operation of nuclear power plants] and the Reprieve Act. However, it is still unclear how to interpret these acts. This is what the negotiations are concerned with.

Vattenfall refers to the two acts in its claim for 871 million kronor. The government received that claim last Friday when the operating statistics of Vattenfall for the fiscal year of 1980/81 were submitted. Vattenfall has already received 200 million kronor. That leaves 671 million kronor.

The total amount of damages just for the fiscal years of 1979/80 and 1980/81 will be 871 million kronor. Vattenfall may claim an additional several hundred million kronor under the coming operating statistics. The total amount of damages claimed by Vattenfall may thus be slightly more than 1 billion kronor.

On the basis of this method of calculation, the Forsmark power group may thus receive slightly more than 1.5 billion kronor for its three reactors, and the Oskarhamn power group perhaps slightly more than 500 million kronor for its reactor.

The total amount of damages will thus be approximately 3 billion kronor.

7262

CSO: 5100

ANTI-N POWER GROUP HOLDS FIRST MEETING SINCE REFERENDUM

Stockholm DAGENS NYHETER in Swedish 8 Jun 80 p 6

[Article by Ola Sall]

[Text] Halting units 11 and 12.

That will be the most important task for the Anti-Nuclear Power Group, line 3, which yesterday held its first meeting after the referendum.

"The struggle goes on," said the buttons on the shirts of 500 delegates. But the conference also became a show of self-examination in which the reasons for the mistakes from the referendum were pondered.

The Anti-Nuclear Power Group, which prior to the referendum had half a million active members, will now be reorganized and expects to get 25,000 members.

The initial problem of the new board will be trying to settle the shaky finances of the Anti-Nuclear Power Group. Debts totalling 2.3 million kronor have been financed through bank loans.

The Anti-Nuclear Power Group is fighting with the Swedish Internal Revenue Service over 1.5 million kronor paid in value added taxes, which they want to have refunded.

"I know that there is a surplus in the local groups which can cover part of the deficit. I hope that individual members will help us cover the rest," says former spokesman Lennart Daleus.

The Anti-Nuclear Power Group will now be completely reorganized. It will no longer be a combination of a number of organizations but will be based on individual membership.

More Democracy

"We must get rid of the top leadership and get more democracy into the organization," said Lennart Daleus.

The board expects to get 25,000 members in the new organization. However, the group will continue to call itself the Popular Campaign.

The new name will be the Anti-Nuclear Power Popular Campaign, or simply the New Popular Campaign.

"There have been proposals that we become a political party, but it is probably better for us to continue concentrating on energy issues also in the future," said Lennart Daleus.

Today, Sunday, the conference will be electing a new board, which will be sitting for 6 months. The previous board, headed by Lennart Daleus, has offered to remain in office to settle the shaky finances of the organization.

Time Schedule Upset

During the first day of the conference, there were many who wanted to state their opinions on the future of the organization as well as on previous failures. The time schedule became upset immediately, and the afternoon, which was to have been devoted to future planning, became instead a forum for speeches on previous mistakes.

"We had difficulty reaching the places of work. We lost because there were three alternatives instead of two."

These were the most common explanations given for the election defeat.

But encouraging acclamations were not missing either.

"We have not tired. We shall become stronger, the struggle will go on," were slogans, releasing applause.

New Issues

All speakers agreed that the referendum had to be respected. Instead, one now has to concentrate on the issues which were not settled through the ballot in March.

Halt uranium mining! Oppose reprocessing! No export of reactor technology! Concentrate on alternative energy sources!

"At present, the most important tasks will be to halt Oskarshamn 3 and Forsmark 3, the 11th and 12th reactors," said former minister Ulla Lindstrom. "We must do everything to prevent the new energy policy goals from being adopted by the Riksdag next Wednesday."

The Anti-Nuclear Power Group demands that a non-partisan committee be set up to examine whether units 11 and 12 are really needed.

Stig Carlsson of Motala and Bosse Johansson of Gallivare were two of the delegates participating in the conference in the civic community center. DAGENS NYHETER spoke to them during a break.

Stig Carlsson: "We have not given up hope. There is still a lot of work left for us to do. In the local societies, we can tackle energy issues on home ground. Many big industrial enterprises, for example, waste energy, and we can spread information on inexpensive alternative forms of energy."

Another Accident

"I believe that the opposition to nuclear power will increase anew. We can probably expect another accident of the Harrisburg type."

Bosse Johansson of Gallivare: "We must today examine the mistakes we have made in order to find out how to build up the new organization. We must, for example, find better ways of reaching the places of work. In Gallivare we found it very difficult to get to talk to the miners because line 2, through the union, had a monopoly on the dissemination of information in the mines."

7262
CSO: 5100

SWEDEN

BRIEFS

NUCLEAR POWER PHASEOUT--Nuclear power is to be phased out in Sweden by the year 2010 at the latest. This was decided by the Riksdag today in its decision on energy policy. The Riksdag rejected by 307 votes to 20 the proposal of the party of the left (Communists) that reactors Nos 11 and 12 should not be built and that the nuclear powerplant in Barsebaeck be closed. Today's decision therefore means that 12 reactors are to be built and used, but it also means that so-called breeder reactors and small thermal reactors for producing district heating are not to be used in Sweden. The Riksdag rejected a Center Party proposal to oppose the plan to transfer hot water from nuclear power-plants to the district heating networks of big cities. Hot water pipes must be considered, according to the Riksdag decision.
[Text] [LD101900 Stockholm: Domestic Service in Swedish 1600 GMT 10 Jun 80]

CSO: 5100

COUNCIL OF STATE APPROVES NUCLEAR POWERPLANT

Geneva JOURNAL DE GENEVE in French 29 May 80 p 17

[Text] On 8 February 1980, the Department of Transportation, Communications and Energy invited the Geneva government to issue a notice on the request made by the Graben Nuclear Power Station for a general authorization for a nuclear station with boiling water reactor, of 1140 MW power. In its answer, the Geneva government asked, as it had previously done, at the time of the general authorization for the Kaiseraugst power station, for additional data to justify the need for a power station, and raised the question of diversification of power supply sources. Apart from these reservations, the Council of State considers that the installation considered "satisfies a potential energy need." But we give below the most significant extracts of the letter dated 14 May 1980. (pad)

Referring to the previous answer we had formulated concerning the general authorization for the Kaiseraugst SA power station, our Council believes, once again, that the arguments put forward to support the application, and intended to justify the "need" for the power station, do not represent a proof in the strict sense of the term.

In view of the considerable importance assumed, under all aspects, by the installation of new nuclear power stations, our Council would have desired that besides the elements appended, the applicant should provide, to support the request, an additional analysis, including:

--a reexamination of the socioeconomic factors which would affect the consumption of electricity in Switzerland up to the year 2000;

--a more thorough estimate of the possible saving in energy and the energy components derived from nonconventional sources.

It is acknowledged today that the amount of the new sources of energy in the energy budget as a whole is necessarily limited and our supply up to the year 2000 must be planned within the framework of a diversification which could not reasonably exclude the nuclear component. On the other hand,

although the energy saving campaigns were considered successful, they demonstrated the limits of this possibility; we may expect at most a slowing down, or even a long-term stabilization, of the total needs.

We cannot be unaware either that the European power companies have to satisfy certain requirements as regards the certainty of the supply foreseen for mutual assistance between countries.

Moreover, considering the attitudes assumed with regard to the Kaiseraugst power station, the hypothesis that this station may not be built, cannot be set aside. If this were the case, it is apparent that a considerable energy deficit would be felt in 1987-1988. We cannot dispute this fact and are therefore compelled to acknowledge that the work on the building of a power station should begin as soon as possible.

In the name of the Council of State

Dominique Haenni
Chancellor

Guy Fontanet
President

9018

CSO: 5100

END

END OF

FICHE

DATE FILMED

17 Aug. 1981